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# Evaluation of an Intensive Treatment Program for Disrupted Patient–Staff Relationships in Psychiatry

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## Search terms:

Description of a program, disruption, evaluation, severe mental illness

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**PURPOSE:** Some patients in psychiatric treatment are considered extremely difficult to treat because of the disruptive nature of their relationships with treatment staff. In this paper, we describe and evaluate a specialist inpatient treatment program for these patients.

**DESIGN AND METHODS:** Data were collected from medical records and daily reports of patients ( $n = 108$ ). Pretest–posttest measurements were used to evaluate the treatment.

**FINDINGS:** The main treatment method consists of the provision of safety, structure, and cooperation. Treatment results show statistically significant changes from admittance to discharge.

**PRACTICE IMPLICATIONS:** The collaborative and consistent manner in which nurses approach the patients is crucial for quality of care.

## Background

Some patients undergoing psychiatric treatment are extremely difficult to treat because of their disrupted relationships with treatment staff. Most of these patients suffer from severe mental illnesses and many of them are admitted and/or treated against their will because they endanger themselves or others. Often they have multiple and complex problems and needs that cannot be met fully by staff, for example, severe self-harming and suicidal behavior, threatening or actual aggression, and disruptive psychotic behaviors.

Staff often have trouble dealing with these patients, and treatment may end prematurely and on an unsatisfactory note. In such cases, the relationship between patient and staff is disrupted and their cooperation may end despite the patient's continuing psychiatric problems and need for care. When these patients are found too complicated to treat, they may be referred to another healthcare setting or receive no treatment at all (Koekkoek, Van Meijel, & Hutschemaekers, 2006). Their suffering continues and their distrust in the healthcare system increases, hampering each subsequent relationship with a healthcare provider (Boeckhorst, 2003). Staff

also pay a considerable price in terms of their own endurance and personal sense of well-being (Koekkoek, Van Meijel, Schene, & Hutschemaekers, 2009). Nurses who have close contact with patients on the ward are particularly vulnerable. The literature reveals a lack of effective treatment options for patients engaged in disrupted patient–staff relationships (Koekkoek et al., 2006). Current intervention strategies focus predominantly on setting limits and providing a clear treatment structure, and on assuming a validating attitude toward the patient (Koekkoek et al., 2006). However, none of these interventions have been subjected to empirical investigation.

In the Netherlands, patients who are in a severely disrupted relationship with treatment staff can be referred to special centers for intensive treatment (CITs). The CITs describe their target group as follows: “The untreatable patient's interaction with his or her surroundings is so problematic that it threatens to disintegrate the system to which the patient belongs” (Algra, Meerveld, & Roosenschoon, 1997, p. 1). Recently, a qualitative study examining the experiences of patients treated at one CIT was published (Bos, Kool-Goudzwaard, Gamel, Koekkoek, & Van Meijel, 2012). The patients all mentioned structure, cooperation, and safety as the main components of treatment. All

but two ( $n=12$ ) reported that their anxiety and aggression had decreased, and that their confidence had increased by the end of their treatment at the CIT. In the present article, we describe the specialist treatment program of one of the three CITs in the Netherlands. We specifically highlight the role of staff (mostly nurses) in the treatment process. We also describe the specific characteristics of patients referred to this center. Finally, we evaluate the CIT's treatment results.

## Methods

### Treatment Program: Referral and Admission

Patients are referred to a CIT by the mental healthcare center treating them when the center deems the patient–staff relationship to be severely disrupted. There may be several reasons for this disruption, the most common being severe aggression, severe self-harming and suicidal behavior, and persistent and disruptive psychotic behavior, combined with discord within the treatment team. Many of these patients are admitted to the mental health center involuntarily under a legal order. As a result, many patients resist treatment and refuse to cooperate. Seclusion and restraint are commonly used interventions for regulating disruptive behavior, sometimes leading to long-term seclusion as the situation becomes more and more disruptive.

When patients are referred to a CIT, a number of different options are possible: admission, rejection, consultation, and referral to another center (e.g., a forensic institution). On a yearly basis, about 75 patients are referred to the CIT. An average of 60% is admitted and 13% is rejected. In some cases, consultation is offered (the patient stays where he or she is being treated) and some patients are referred to other centers (Kool, 2011). There is always a waiting list of about 10 patients for admission to the CIT; the average time from referral to admission is 2–3 months.

Patients are admitted to a CIT on a temporary basis and return to the referring center as soon as the treatment goals have been achieved. These goals are determined by the referring center and the CIT together, and concern (a) relieving the referring team, (b) diagnostics, (c) treatment, and (d) assess-

**Table 2.** (Safety) Facilities of CIT

- Single patient rooms equipped with private toilet and shower
- Two large living rooms
- Fire alarms throughout the building
- Personal alarm for staff for unsafe situations
- Staff skilled in managing aggressive and threatening situations
- Professional security team of the mental health center that can be requested to give assistance

Note: CIT, center for intensive treatment.

ment of long-term treatment options. The CIT, which is the focus of this study, has a closed ward, an open ward, and an outpatient clinic. This study only concerns the closed ward, which treats a maximum of 17 patients at a time. The CIT has a large multidisciplinary team, see Table 1. The nurses only work on the closed ward; the other disciplines also work on the open ward and in the outpatient clinic. Compared to regular psychiatric treatment settings, CITs have a larger budget, based on their specialist function. The premium per bed per day is around €500.

The CIT setting has many facilities meant to ensure safety, see Table 2.

### Treatment Philosophy

The aim of the CIT treatment program is to change how things were done in the past. Almost all patients referred to a CIT are already in long-term treatment, and that has not yielded the desired result. The conventional and sometimes evidence-based treatment protocols do not work in these specific cases. Previous treatment appears to have failed mainly because of the patient's disruptive behavior and disrupted therapeutic relationships. It is therefore the disruption that needs to be addressed first. Once the disrupted relationship has been stabilized, more attention can be given to treating the psychiatric disorder and related psychosocial problems. Since there is no formal treatment for disruption, CIT has developed a special intervention program for these patients. The underlying treatment philosophy is based on many years of experience working with disrupted treatment situations. Patients admitted to a CIT typically appear to have an unresolved attachment style (Ernste & Visser, 2002). In an unresolved attachment style, the attachment figures in the past were often violent and fearsome. Instead of being protective and caring, they caused fear (Lyons-Ruth & Jacobvitz, 1999). As a consequence, the patient's distrust in other people hinders constructive emotional bonding and social interaction, in which effectively controlling the distance from others and the availability of the other are crucial.

### Treatment Approach

The treatment provided by the CIT is based on attachment theory (Ainsworth & Bowlby, 1991) and relationship man-

**Table 1.** Number and Full-Time Equivalent of the Multidisciplinary Treatment Staff

Function	Number	Full-time equivalent
Mental health nurses	29	24.6
Occupational therapists	5	4.2
Physician	1	0.8
Psychiatrist	1	0.9
Psychologists	3	2.8
Psychotherapists	3	2.4
Social worker	1	0.6

agement (Dawson & MacMillan, 1993). Patients are seen as adults, responsible for their own behavior. They are not punished or blamed for their problem behavior, but are asked to explore how that behavior disrupts their relationships with other people. Elements of cognitive behavioral therapy are introduced by replacing maladaptive coping styles with more adaptive coping styles. Because of their 24-hr presence and availability, nurses play an extremely important role. How they respond to the patient's behavior is crucial: In their words as well as in their conduct, they must make the patients aware of the consequences of their behavior. For instance, when a patient runs around the ward shouting and cursing, the nurses order him to stop because his behavior is frightening other people around him. The nurse makes it clear that she is prepared to listen to the patient because it is obvious that the patient wants to communicate something. But the patient has to stop his disruptive behavior before the nurse will take any steps toward communicating with him. The basic attitude of staff is nonvindictive; they offer the patient a clean slate every day, even after incidents. One example is when a patient has harmed herself severely. She has a deep wound in her left leg, which requires 16 stitches. She cannot explain why she needed to harm herself; she only knows she has to go on harming herself because "it is not done yet." The nurse decides to strip the patient's room of all possible sharp objects, to lock the patient's bathroom and wardrobe, and to put her under close surveillance. The nurse explains to the patient why he has taken these measures, and that is mainly for safety reasons. The next morning, the nurse discusses the situation with the patient and when the urge to harm herself has diminished, the patient's room is restored. Essential elements of the interaction are safety, structure, and cooperation (Bos et al., 2012). These three aspects are closely interwoven: For example, safety can be attained by working together effectively, and safety is needed in turn to achieve mutual cooperation. Furthermore, providing structure facilitates both safety and working together. In practice, safety can be achieved for patients and staff by setting and maintaining limits.

### Treatment Organization

In most cases, patients have displayed disruptive behavior for many years and it takes time for them to realize that this behavior has to change before they can restore interpersonal relationships. Most CIT patients are admitted involuntarily and are not (at first) willing to cooperate. At the start, most of them try hard to continue their challenging behaviors and some even behave more extremely in the first stage of treatment. Consistent and unambiguous conduct is an important component throughout the whole treatment, but that is especially true for nurses in this initial period. Each patient has a personalized treatment plan, describing concrete treatment goals and how to achieve them. Safety (for the patient and the

other people on the ward) is an important goal in any plan. The plan describes what constitutes safety in behavioral terms and what the patient and staff can do if their safety is threatened. These rules are enforced strictly. Patients are consistently encouraged to work together, mostly by increasing their privileges, for example, going out without the direct supervision of nurses. Step by step, patients are made more responsible for their behaviors as treatment proceeds. The treatment is divided into three phases. Safety and structure are the central elements of treatment in the first phase, while the second phase focuses on developing opportunities for cooperation. If the patient achieves a form of cooperation, he or she moves into the third phase, where the treatment of the psychiatric disorder can begin.

One essential part of the treatment program is to guide and invest in staff. The treatment staff at a CIT must be patient and persistent: Most of the patients have limited trust in treatment staff, based on negative experiences in the past. Working with patients who (often) exhibit extreme behavior can also be very difficult, especially owing to strong feelings of countertransference. Staff frequently feel irritation, powerlessness, and frustration (James & Cowman, 2007). CIT staff are aware of these feelings and place considerable emphasis on preventing countertransference reactions. They do so by holding weekly discussions not only of the patient's behavior and treatment progress, but also of their personal reactions to patients. They pay special attention to ambiguity: Does every member of staff react the same way? If not, they explore why, try to solve the lack of consistency, and discuss the need to act consistently in the future. Uncertainty about the treatment policy is the main reason for inconsistent interactions with the patient. In addition to this weekly consultation, nursing staff attend meetings twice a month where they can talk about their personal experience of aggression and other emotionally disturbing experiences with patients. The purpose of this meeting is to prevent them from bottling up these experiences, which would increase the risk of burnout. All staff members are furthermore subjected to supervision and peer review once every 6 weeks.

### Data Collection

To describe the patients who were admitted to the CIT, data were collected from both medical files and daily reports. A quasi-experimental pretest–posttest design was used to evaluate the treatment. For this evaluation, data were collected from medical files of 108 patients treated between 2005 and 2008. We used routine outcome measurement (ROM) data, as well as data collected with a self-constructed instrument, that is, the CIT instrument.

The study was approved by Medisch-Ethische Toetsingscommissie instellingen Geestelijke Gezondheidszorg (METiGG), the ethical review board of the mental health center where the study was conducted.

## Measures

The following data were collected from the medical files and daily reports: demographic data, (aggression) incidents, psychiatric diagnosis at discharge, length of stay at the CIT, and the nature of follow-up treatment after discharge from the CIT.

A literature search for an instrument to measure the outcomes of specialist treatment delivered by the CIT rendered no suitable instruments. The CIT thus developed a new 10-item instrument, including the following variables: psychopathology, (auto)aggression, medication, seclusion, suicidality, participation in therapy, privileges on the ward, social contacts, work/education, and leisure (see Table 3). A 5-point Likert scale was used to score these items, a score of 1 indicating *severe* (or *very frequent*) *problematic behavior* and a score of 5 indicating *no problematic behavior*. Every 6 weeks, staff determined the CIT score for a patient based on their recent observations.

We also used ROM instruments to measure patients' symptoms and functioning including

- The Clinical Global Impressions Scale (CGI; Busner & Targum, 2007)
- The Global Assessment of Functioning Scale (GAF; Endicott, Spitzer, Fleiss, & Cohen, 1976)
- The Health of the Nation Outcome Scale (HoNOS; Wing et al., 1998)
- The Symptom Checklist-90 (SCL-90; Derogatis, Lipman, & Covi, 1973)
- The Dutch Mental Healthcare Thermometer of Appreciation by Clients (Van Wijngaarden, Wennink, & Kok, 2003), which measures the patient's appreciation of the care he or she has received (scale 0–10, a higher score indicating more appreciation)

The therapist completed the CGI, GAF, and HoNOS upon admission, after 6 months, and upon discharge. The patient completed the SCL-90 at the same time. The Dutch Mental Healthcare Thermometer of Appreciation by Clients was completed only upon discharge.

## Data Analysis

All the data were processed using SPSS version 17 for statistical analysis. To compare pretest and posttest scores, paired-samples *t* tests were applied for normally distributed variables and Wilcoxon signed-rank tests for non-normally distributed variables. Effect sizes were expressed in *r* (Field, 2005).

## Findings

### Demographic Characteristics

A total of 108 patients were treated and discharged during the study period: 53 men and 55 women. The average age of these

**Table 3.** CIT Instrument

Symptom	1	2	3	4	5
Psychopathology (Auto)aggression (safety)	Extremely disruptive Several times a week	Severely disruptive ≤ 1x per week	Clearly disruptive ≤ 1x per month	Slightly disruptive ≤ 1x per quarter	Not disruptive Never
Use of medication (safety)	Substantial and continuous abuse Compulsory medication	Substantial, weekly abuse	Monthly abuse	Occasional abuse	Use according to prescription No medication
Seclusion	24-hr seclusion	Enforced by the staff	Indicated by the staff	On own request	None
Suicidality	Very high	High	Average for the population	Low	Absent
Participation therapy (cooperation)	Not able to maintain a conversation	Able to maintain short conversations with one person	Therapy with minor interaction	More interaction and insight	Active cooperation with reflection
Ward	Closed ward, no privileges	Closed ward, supervision	Privileges with mutual agreement or open ward	Weekend outside the clinic	Regularly in own home
Social contacts	Extremely disturbed	Severely disturbed	Clearly disturbed	Slightly disturbed	Not disturbed
Work or education	Not able to work	Simple activities under supervision	Less supervision necessary ≤ 2 hr	Half a day a week	≥ half a day a week
Leisure	None	Initiated by others Under supervision	Little own initiative, boredom does not lead to action	Regularly uses own initiative, boredom is solved by person himself or himself	Useful, autonomic activities

Note: CIT, center for intensive treatment.



**Table 4.** Types of Incidents per Year

Type of aggression	Verbal aggression	Threatening with aggression	Physical aggression toward others	Physical aggression toward property	Deliberate self-harm	Suicide	Sexual intimidation	Total
2005	1,166	190	280	681	343	1	22	2,611
2006	1,451	207	298	649	252	1	8	2,866
2007	895	135	146	662	209	–	10	2,057
2008	1,856	175	200	652	270	–	23	3,165
Average	1,342	177	231	661	269	0.5	16	2,675

patients was 31.5 (range 19–59); most of them (64%) were younger than 35 years. The majority of the patients were single (86%) and childless (80%). Almost half of the patients included had primary education only (47%). About 85% of the patients were admitted to the CIT involuntarily.

### Diagnosis

On Axis I of the *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition (American Psychiatric Association, 2000), 53% of the respondents were diagnosed with schizophrenia, schizoaffective disorder, or another psychotic disorder. About one third of the patients (34%) were diagnosed with a substance abuse disorder. On Axis II, approximately one third of all patients suffered from a borderline personality disorder (30%), whereas 20% were diagnosed with a personality disorder not otherwise specified and 14% with an antisocial personality disorder.

In many cases, patients had more than one diagnosis: 34% of the respondents had two diagnoses on Axis I, and 5% had three diagnoses on this axis. Two diagnoses on Axis II could be observed in 5% of the cases. More than half of the patients (52%) had diagnoses on both axes. One third of the patients had a diagnosis on Axis III. On Axis IV, most problems were registered within the primary support group (75%). Furthermore, many problems existed within the patients' social environment (22%) and in their housing (20%). On Axis V, the average GAF score upon admission was 32.7 points ( $SD = 11.6$ ; range 10–60).

### Incidents

Incidents are closely monitored on the closed CIT ward. We registered an average of 2,675 incidents per year during the period 2005–2008. This is an average of 55 incidents per patient, and 157 incidents per bed. Almost all patients behaved aggressively in one way or another, but about half of the patients included were responsible for the high number of incidents. Most of these incidents concerned verbal aggression and physical aggression toward property. Detailed information about incidents can be found in Table 4: types of incidents per year.

### Length of Treatment, Treatment Continuation, and Appreciation of Patients

The average length of treatment was 5 months ( $M = 5.4$  months, range 1–16). Half of the patients (54%) stayed at the CIT an average of 3–4 months. Female patients stayed significantly longer than male patients: females ( $M = 6.4$ ,  $SD = 3.9$ ) and males ( $M = 4.3$ ,  $SD = 1.9$ ),  $t(80.8) = -3.5$ ,  $p = .001$  (two tailed). Twelve patients (11%) went to live at home after discharge. Almost 80% returned to the referring center. Two persons committed suicide during treatment at the CIT and eight persons continued their treatment elsewhere, mostly in a center other than the referring center. At discharge, 58 patients completed the appreciation scale (the Dutch Mental Healthcare Thermometer of Appreciation by Clients). They gave a mean score of 6.7 ( $SD = 1.48$ ; range 1–10), indicating that they were generally satisfied with their treatment at discharge.

### Treatment Results

Paired-samples  $t$  tests were conducted to evaluate the treatment results for CIT score, SCL-90, and HoNOS. The results show a statistically significant difference between admission and discharge for CIT scores ( $t = -5.48$ ,  $df = 61$ ,  $p < .001$ ,  $r = .46$ ), SCL-90 ( $t = 4.58$ ,  $df = 36$ ,  $p < .001$ ,  $r = .61$ ), and HoNOS ( $t = 3.16$ ,  $df = 82$ ,  $p = .002$ ,  $r = .33$ ). The pretest and posttest differences in CIT and HoNOS scores indicated a medium effect size, and the differences in SCL-90 scores a large effect size. Wilcoxon signed-rank tests were conducted to evaluate the results for GAF and CGI. Both scales showed a significant change in the patients' functioning: GAF ( $z = -4.97$ ,  $p < .001$ ,  $r = .35$ ) and CGI ( $z = -4.75$ ,  $p < .001$ ,  $r = .33$ ); both indicated a medium effect size (Table 5).

### Discussion

The results of the CIT treatment are positive: The patients improved significantly and they generally appreciated their treatment. There has been no systematic investigation whether these results will be retained and for how long. Regular contact with referring services, however, suggests that

	<i>n</i>	Pretest		Posttest		Test statistic	<i>p</i>	<i>r</i>
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
CIT scale	62	26.34	4.71	29.18	5.09	$t = -5.48$	.000	.46
SCL-90	37	227.32	84.67	182.65	77.57	$t = 4.58$	.000	.61
HoNOS	83	17.22	6.55	15.17	6.15	$t = 3.16$	.002	.33
GAF	104	32.66	11.63	37.47	10.71	$z = -4.96$	.000	.35
CGI	93	5.33	0.993	4.73	1.17	$z = -4.75$	.000	.33

Notes: A higher score in the CIT scale and in the GAF represents improved functioning; for the other scales, higher scores represent increased symptomatology/problems.

For CIT scale, SCL-90, and HoNOS, a paired-samples *t* test was performed.

For GAF and CGI, a Wilcoxon signed-rank test was performed.

CGI, Clinical Global Impressions Scale; CIT, center for intensive treatment; GAF, Global Assessment of Functioning Scale; HoNOS, Health of the Nation Outcome Scale; SCL-90, Symptom Checklist-90.

**Table 5.** Pretest–Posttest Measurements, Paired-Samples *t* test and Wilcoxon Signed-Rank Test

about half of the patients who have been treated successfully retain their new behaviors for a considerable time. The results of this study show that CIT treatment can be beneficial in situations of severely and long-term disrupted patient–staff relationships. Creating and maintaining a constructive relationship with the patient is the main focus of treatment. Of special interest is the role of nurses and how their attitude and interventions influence the disruptive behavior. This is in line with Dawson and MacMillan's principles of relationship management (Dawson & MacMillan, 1993). They described how the relationship between patient and staff can aggravate the patient's problems, especially for those with borderline personality disorder. Treating the patients as responsible, competent persons leads to patients who are more in control of and responsible for their own treatment (Dawson & MacMillan, 1993). The aim of treatment at the CIT is for the patient to understand the importance of the quality of the relationship and, once that is understood, to create conditions in which the patient can reclaim responsibility and control. This concerns all patients and not only those diagnosed with a borderline personality disorder. The positive change in functioning is confirmed by the patients' awarding an appreciation score of almost 7 for their treatment. Given that almost all the patients in this study were admitted to the CIT involuntarily, this is a remarkably positive score.

Disruption in a relationship is a problem created by all the parties in that relationship. The CIT treatment program focuses on both patient and staff behaviors that contribute to the disruption. Nurses and other staff members need advanced interactive and reflective skills to be able to look at their behavior critically and adapt their professional behavior to every situation that they encounter in clinical practice. Based on this study, we cannot conclude that disruptive behavior can be completely ruled out or that such behavior will not reappear. The patients still suffer from severe mental illnesses and they remain extremely vulnerable when they return to the center that referred them. An effort is made to continue each patient's treatment by inviting

nurses at the referring hospital to the CIT for an 8-hr visit on the ward. This allows them not only to communicate about disruption but also to experience the CIT method for themselves.

Treatment at a CIT is more expensive than regular treatment. There are two other specialist treatment settings for the relevant target group in the Netherlands and together they assist all general mental health centers in cases of severely disrupted relationships. The expenditure for patients with severe mental disorder is high, but it leads to a better quality of care and a better quality of life for these vulnerable patients.

One limitation of this study is that we were unable to compare our findings with the scores of control patients. The target group of our study is composed of patients with extremely challenging behaviors, and it was impossible to find a natural control group. Even the other two CITs differ in several ways from the CIT where our study was carried out: One CIT focuses especially on patients with psychotic disorders and the other CIT on patients with personality disorders. Each CIT also has its own treatment philosophy and program, which makes it difficult to compare them. Furthermore, for ethical reasons patients suffering from a severe mental illness cannot be randomized to a nontreatment waiting list condition in a randomized controlled trial. Due to the absence of control patients, the results of this study should be interpreted with caution.

Some other limitations of this study should be mentioned here: The number of missing values is quite considerable on some measures. The CIT instrument was implemented at the end of 2005 and it took some time before all the team members were familiar with it. The relatively low number of SCL-90 scores was due to the fact that only some of the patients were able to complete this list upon admission. Many patients were unable to concentrate on the questions at that point, or were confused by them. Others refused to fill in the list. This may have led to selection bias, and the results concerning psychopathology should therefore be interpreted with this limitation in mind. Rater bias is another form of bias

that must be considered: The therapist who rated the instruments may expect a certain outcome as a result of the therapy given.

Another limitation is the use of a nonvalidated measuring instrument, that is, the CIT instrument. Despite the limitation concerning its validation status, the CIT instrument has a high score on face validity and covers the most important disruptive behaviors of our target group. To compensate for this limitation, we used other well-validated instruments commonly applied in the Netherlands to measure outcomes in psychiatry. Positive results were observed for these instruments, too. Overall, despite the methodological limitations, we consider these results promising.

## Conclusion

This study of disruptive patient behavior demonstrates that most of the patients in question can be treated successfully and that their functioning can be improved by targeting the relationship as the primary focus of treatment. Whether and how long these results are retained is a subject for further investigation.

## Implications for Nursing Practice

Competent and powerful nurses are needed to treat patients who suffer from a severe mental illness and who exhibit seriously disruptive behavior. This means that nurses need to be firmly grounded in life and must be resilient in dealing with the stressful situations they encounter in their work. All nurses who work at the CIT are selected for these qualities. They are trained in special skills related to prevention and to dealing with aggressive and other problem behavior. Their training also focuses on interactive skills, with special attention going to effective listening and communicating based on the principles of solution-focused therapy. Supervision provided by a supervisor who is not connected to the CIT is extremely important to the nurses: Here, they can talk about their experiences with patients and about the difficulties that they encounter in their work with both fellow nurses and other colleagues. They can express their emotions, but also discuss their own role in the emergence of disruptive behavior. It often takes a long time before these patients are able to change their behaviors, so nurses need a lot of patience and persistence in their work. On the other hand, when treatment is successful, nurses contribute significantly to the quality of life of these vulnerable patients.

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